UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

23446 7590 08/26/2009 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET EXAMINER

WELZHENG

ART LINIT PAPER NUMBER

2192 DATE MAILED: 08/26/2009

MCANDREWS HELD & MALLOT, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/761,735 | 01/20/2004 | James P. Gustafson | 14327US02 | 3663 |

TITLE OF INVENTION: UPDATE SYSTEM CAPABLE OF UPDATING SOFTWARE ACROSS MULTIPLE FLASH CHIPS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES | \$755 | \$300 | \$0 | \$1055 | 11/27/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further indicated unless correct maintenance fee notifica | correspondence includir ed below or directed oth | of transmitting the 1336 ig the Patent, advance of herwise in Block 1, by (a | rders and notification of r a) specifying a new corre | naintenance fees w spondence address; | ill be and/o | mailed to the current (b) indicating a sepa | correspondence address as trate "FEE ADDRESS" for |
|---|--|--|---|--|---|--|--|
| | ENCE ADDRESS (Note: Use Bi | ock I for any change of address) | Not Fee pap | e: A certificate of a (s) Transmittal. This ers, Each additional | mailing s certil paper of ma | can only be used for icate cannot be used for such as an assignmenting or transmission. | or domestic mailings of the for any other accompanying nt or formal drawing, must |
| 500 WEST MAI SUITE 3400 | 7590 08/26 S HELD & MALI DISON STREET | | I be | Cert | ificate | of Mailing or Trans | |
| CHICAGO, IL 6 | 10000 | | <u> </u> | | | | (Depositor's name) |
| | | | <u> </u> | | | | (Signature) |
| | | | L | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | | ATTO | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/761,735 TITLE OF INVENTION | 01/20/2004 I: UPDATE SYSTEM C. | APABLE OF UPDATING | James P. Gustafson G SOFTWARE ACROSS | MULTIPLE FLASI | 1 СНІ | 14327US02 PS | 3663 |
| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | YES | \$755 | \$300 | \$0 | | \$1055 | 11/27/2009 |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS |] | | | |
| WEI, Z | HENG | 2192 | 717-172000 | • | | | |
| "Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp | " Indication form ed. Use of a Customer A TO BE PRINTED ON | (f) the names of up to or agents OR, alternati (2) the name of a single registered attorney or a 2 registered patent auto listed, no name will be THE PATENT (print or try data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY | wely, e firm (having as a agent) and the name rmeys or agents. If a printed. pe) atent. If an assigna assignment. | membes of unionan | er a 2p to p to se is 3 | ocument has been filed for |
| Please check the appropr | iate assignee category or | categories (will not be pr | rinted on the patent): | Individual 🚨 Co | rporati | on or other private gro | oup entity 🚨 Government |
| Advance Order - | wo small entity discount p | permitted) | b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo | d. Form PTO-2038 | is atta | ched. | shown above) ficiency, or credit any n extra copy of this form). |
| | s SMALL ENTITY state | is. See 37 CFR 1.27. | ☐ b. Applicant is no lon | | | | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will not be accepte tes Patent and Trademark | d from anyone other than t Office. | he applicant; a regi | stered . | attorney or agent; or th | ne assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | Registration No. | | | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223 | nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but (irginia 22313-1450. DC k13-1450. | FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR | on is required to obtain or a 1.14. This collection is est depending upon the indivention of fice COMPLETED FORMS TO COMPLETED FORMS TO TO TO T | retain a benefit by the timated to take 12 m ridual case. Any co- er, U.S. Patent and D THIS ADDRESS | ne pub ninute: mmeni Frader . SEN | tic which is to file (and to complete, including s on the amount of tire ark Office, U.S. Deptor of the total D TO: Commissioner | I by the USPTO to process) ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450, |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------------------|----------------|----------------------|---------------------------------|------------------|--|
| 10/761,735 | 01/20/2004 | James P. Gustafson | 14327US02 | 3663 | |
| 23446 75 | 590 08/26/2009 | EXAMINER | | | |
| MCANDREWS | HELD & MALLOY, | WEI, ZHENG | | | |
| 500 WEST MADI | SON STREET | ART UNIT | PAPER NUMBER | | |
| SUITE 3400 CHICAGO, IL 60661 | | | 2192 DATE MAILED: 08/26/2009 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1070 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1070 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/761,735 GUSTAFSON ET AL. Notice of Allowability Examiner Art Unit ZHENG WEL 2192 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 06/22/2009. The allowed claim(s) is/are 1-52. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. __ 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 6 Interview Summery (PTO-413). Notice of Draftperson's Patent Drawing Review (PTO-946). Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Pacer No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance

of Biological Material

9. ☐ Other _____.
/Tuan Q. Dam/

Supervisory Patent Examiner, Art Unit 2192

Art Unit: 2192

DETAILED ACTION

Remarks

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/22/2009 has been entered.
- This office action is in response to the amendment filed on 06/22/2009.
- 3. Claims 1, 6, 28 and 49 have been amended.
- 4. Claims 1-52 remain pending and have been examined.

EXAMINER'S AMENDMENT

- 5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 6. Authorization for this examiner's amendment was given in a telephone interview with Mr. Kevin E. Borg, (Reg. No. 51,486) on August 20, 2009 to obviate any potential 35 U.S.C. § 112 issues, and to put the claims in condition for allowance. A proposed amendment has been received on 08/21/2009 and adopted by Examiner. See pages 5-15 attached hereto.

Art Unit: 2192

 Claims 1, 2, 6, 24-28 and 45-49 have been amended and now being allowed after Examiner's amendment

Allowable Subject Matter

- 8. Claims 1-52 are allowed. As the Applicants pointed out under REMAKRS section, page number 14-18, neither O'Neil nor Woodward discloses identifying, from a group corresponding to memory devices to which access has been enabled, updating software corresponding to at least the associated type (access type) of the at least one of the plurality of memory devices and wherein the non-volatile memory comprises software functions enabling access to and manipulation of the first memory device and the second memory device, first updating software corresponding to the first associated type (access type), and second updating software corresponding to the second associated type (access type), and in as such manners as recited in the independent claims 1, 6, 28 and 49, thus each of the dependent claims are allowable for at least the same reasons.
- 9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-02059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. W./ Examiner, Art Unit 2192 /Tuan Q. Dam/ Supervisory Patent Examiner, Art Unit 2192

Page 5

Application/Control Number: 10/761,735

Art Unit: 2192

Listing of Claims:

1. (Currently amended) A method of updating non-volatile memory in an electronic device via a communication network, the non-volatile memory comprising a plurality of memory devices comprising a first memory device having a first associated access type and second memory device having a second associated access type, wherein the first associated access type and second associated access type are not the same, the method comprising:

receiving update information via the communication network;

selecting at least one of the plurality of memory devices to be updated using the update information;

identifying, from a group corresponding to memory devices to which access has been enabled, updating software corresponding to at least the associated <u>access</u> type of the at least one of the plurality of memory devices; and

updating the at least one of the plurality of memory devices using the identified updating software and the update information;

wherein the non-volatile memory comprises software functions enabling access to and manipulation of the first memory device and the second memory device, first updating software corresponding to the first associated <u>access</u> type, and second updating software corresponding to the second associated <u>access</u> type.

- (Currently amended) The method according to claim 1, further comprising determining the associated <u>access</u> type of the at least one of the plurality of memory devices to be updated.
- (Original) The method according to claim 1, wherein the communication network is a wireless network.
- 4. (Original) The method according to claim 1, wherein the communication network is a public network.

Application/Control Number: 10/761,735

Art Unit: 2192

(Previously presented) The method according to claim 1, further comprising verifying the updating of the one of the at least one memory device using one of a CRC (Cyclic Redundancy Check), a checksum, a hash code, and a digital signature.

6. (Currently amended) A method of updating non-volatile memory in an electronic device via a communication network, the non-volatile memory comprising a plurality of memory devices comprising a first memory device having a first associated access type and a second memory device having a second associated access type, wherein the first associated access type and second associated access type are not the same, the method comprising:

communicating update information in an update package via the communication network from a management server to the electronic device; and

employing an update agent to interact with a memory library and the plurality of memory devices in non-volatile memory in the electronic device, and to identify, from a group corresponding to memory devices to which access has been enabled, updating software corresponding to at least an associated <u>access</u> type of at least one of the plurality of memory devices;

wherein the non-volatile memory comprises software functions enabling access to and manipulation of the first memory device and the second memory device, first updating software corresponding to the first associated <u>access</u> type, and second updating software corresponding to the second associated <u>access</u> type.

7. (Previously presented) The method according to claim 6, further comprising:

employing a memory manager to access contents stored in the plurality of memory devices, wherein the plurality of memory devices comprises a plurality of FLASH memory chips; and

employing the memory library to modify contents of at least one FLASH memory chip.

 (Previously presented) The method according to claim 7, wherein the plurality of FLASH memory chips comprise FLASH memory chips fabricated by different

Art Unit: 2192

manufacturers, and the plurality of FLASH memory chips comprise one of a same amount of memory size and a different amount of memory size.

9. (Original) The method according to claim 8, further comprising:

determining which of the plurality of FLASH memory chips correspond to a particular FLASH memory modification;

employing an appropriate FLASH memory chip function; and performing a corresponding FLASH memory modification.

- 10. (Original) The method according to claim 8, further comprising employing the memory library by the update agent to permit access to and manipulation of a plurality of FLASH memory chips fabricated by different manufacturers, and invoking appropriate functions stored in the memory library corresponding to the different manufacturers FLASH memory chips.
- 11. (Previously presented) The method according to claim 6, further comprising storing generic functions in the memory library which are employable by the update agent; and

modifying contents of the at least one of the plurality of memory devices without identifying actual details regarding a specific memory device, wherein the actual details may be selected from a group comprising memory device manufacturer, memory device type, memory size, memory model, and memory brand.

- 12. (Previously presented) The method according to claim 6, wherein the plurality of memory devices are adapted to be grouped together, paired together, or arranged serially in non volatile memory in the electronic device.
- 13. (Original) The method according to claim 6, further comprising creating a memory map of memory device architecture, the memory map containing information selected from a group comprising of a number of memory devices being employed by the electronic device, address ranges assigned to the memory devices, memory device

Art Unit: 2192

operating mode, a map of data segments resident in the memory devices, and a map of code segments resident in the memory devices.

- 14. (Previously presented) The method according to claim 6, wherein the electronic device comprises one of a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 (Moving Pictures Experts Group Phase 1 Audio Layer 3) player, and a digital camera.
- 15. (Original) The method according to claim 6, further comprising employing an update package status and reference section by the update agent code to retrieve information regarding functions stored in a memory library code.
- 16. (Original) The method according to claim 15, wherein the update package status and reference section further comprises at least one of a status flag, starting address, authentication value, location of update package, and locations of a plurality of modification functions in non-volatile memory of the electronic device.
- 17. (Original) The method according to claim 6, wherein the update package comprises update information for at least one of firmware and software, version upgrades, instructions to add new services, and instructions to delete services employable in the electronic device.
- 18. (Original) The method according to claim 6, further comprising employing a boot initialization code to determine whether an update agent code is executed.
- 19. (Original) The method according to claim 18, wherein determining whether the update agent code is executed comprises evaluating status information resident in an update package status and reference section, and wherein if it is determined that the update agent code is to be executed, then the update agent code accesses an update package resident in the non-volatile memory of the electronic device by employing an address of the update package stored in the update package status and reference section.

Art Unit: 2192

20. (Previously presented) The method according to claim 6, wherein the update agent is adapted to interact with a plurality of the plurality of memory devices as a single logical block of non-volatile memory without distinguishing between specific memory devices

- 21. (Original) The method according to claim 20, wherein the plurality of memory devices are arranged according to one of contiguously or non-contiguously in memory, and code and data resident in the memory devices are updateable by the update agent regardless of which memory device the code and data reside in.
- 22. (Original) The method according to claim 6, wherein the memory library is adapted to accommodate a plurality of different types of memory devices by being provided with drivers for the plurality of different types of memory devices during manufacture.
- 23. (Original) The method according to claim 6, wherein the update agent is adapted to accommodate a plurality of different types of memory devices by accessing the memory library and compiling the update agent anew with drivers for the plurality of different types of memory devices stored in the memory library during manufacture.
- 24. (Currently amended) The method according to claim 6, wherein the electronic device comprises at least one processor one or more processors, and wherein the at least one processor one or more processors may be associated with a specific memory device.
- 25. (Currently amended) The method according to claim [[24]] 6, wherein the at least one processor electronic device comprises a plurality of processors and each of the processors is associated with a specific memory device.
- 26. (Currently amended) The method according to claim [[24]] 6, wherein the at least—one—precessor electronic device comprises a plurality of processors and the plurality of processors are adapted to share the plurality of memory devices.

Application/Control Number: 10/761,735

Art Unit: 2192

27. (Currently amended) The method according to claim [[24]] 6, wherein the et least—one—processor electronic device comprises a digital signal processor (DSP) adapted to execute DSP code retrieved from at least one memory device.

28. (Currently amended) A mobile services network adapted to update at least one electronic device, the network comprising:

a management server communicatively connectable to the at least one electronic device via a communication link, the management server adapted to transmit update information in an update package to the electronic device, and the electronic device comprising a plurality of memory devices comprising a first memory device having a first associated access type and a second memory device having a second associated access type, wherein the first associated access type and second associated access type are not the same, and an update agent employing a memory library to interact with the plurality of memory devices in non-volatile memory in the electronic device and to identify, from a group corresponding to memory devices to which access has been enabled, updating software corresponding to at least an associated access type of at least one of the plurality of memory devices.

29. (Previously presented) The network according to claim 28, further comprising:

a memory manager adapted to be employed by the update agent to access contents stored in the plurality of memory devices; and

a memory library adapted to support modifications of content in the plurality of memory devices.

30. (Previously presented) The network according to claim 28, wherein the plurality of memory devices comprise memory devices fabricated by different manufacturers, and the plurality of memory devices comprise one of a same amount of memory size and a different amount of memory size.

Art Unit: 2192

31. (Original) The network according to claim 30, wherein the update agent is adapted to determine which of the plurality of memory devices correspond to a particular memory modification, and employ an appropriate memory device function available in the memory library to perform a corresponding memory modification.

- 32. (Original) The network according to claim 28, wherein the memory library is employable by the update agent to permit access to and manipulation of a plurality of memory devices fabricated by different manufacturers by invoking appropriate functions stored in the memory library which correspond to the different manufacturers memory devices.
- 33. (Previously presented) The network according to claim 28, wherein the memory library may store generic functions employable by the update agent to modify contents of the plurality of memory devices without identifying actual details regarding a specific memory device, the actual details may be selected from a group comprising memory manufacturer, memory type, memory size, memory model, and memory brand.
- 34. (Previously presented) The network according to claim 28, wherein the plurality of memory devices are adapted to be grouped together, paired together, or arranged serially.
- 35. (Original) The network according to claim 28, further comprising a memory map of memory device architecture, the memory map being adapted to contain information selected from a group comprising a number of memory devices being employed by the electronic device, address ranges assigned to the memory devices, memory device operating mode, a map of data segments resident in the memory devices, and a map of code segments resident in the memory devices.
- 36. (Previously presented) The network according to claim 28, wherein the electronic device comprises one of a mobile cellular phone handset, a personal digital assistant, a pager, an MP3 (Moving Pictures Experts Group Phase 1 Audio Layer 3) player, and a digital camera.

Art Unit: 2192

37. (Original) The network according to claim 28, wherein the non-volatile memory further comprises an update package status and reference section employable by an update agent code to retrieve information regarding functions stored in a memory library code.

- 38. (Original) The network according to claim 28, wherein the update package comprises update information for at least one of firmware and software, version upgrades, instructions to add new services, and instructions to delete services employable in the electronic device.
- 39. (Original) The network according to claim 28, wherein the electronic device is adapted to employ a boot initialization code to determine whether an update agent code is executed, and determining whether the update agent code is executed comprises evaluation of status information resident in an update package status and reference section, wherein if it is determined that the update agent code is to be executed, then update agent code accesses an update package resident in the non-volatile memory by employing an address of the update package stored in the update package status and reference section.
- 40. (Original) The network according to claim 39, wherein the update package status and reference section further comprises at least one of a status flag, starting address, authentication value, location of update package, and locations of a plurality of modification functions in non-volatile memory of the electronic device.
- 41. (Previously presented) The network according to claim 28, wherein the update agent is adapted to interact with a plurality of the plurality of memory devices as a single logical block of non-volatile memory without distinguishing between specific memory devices.
- 42. (Previously presented) The network according to claim 41, wherein the plurality of memory devices may be arranged as one of contiguously or non-contiguously in memory, and code and data resident in the memory devices are

Art Unit: 2192

updateable by the update agent regardless of which memory device the code and data reside in.

- 43. (Original) The network according to claim 28, wherein the memory library is adapted to accommodate a plurality of different types of memory devices by being provided with drivers for the plurality of different types of memory devices during manufacture.
- 44. (Original) The network according to claim 28, wherein the update agent is adapted to accommodate a plurality of different types of memory devices by accessing the memory library and compiling the update agent with drivers for the plurality of different types of memory devices stored in the memory library during manufacture.
- 45. (Currently amended) The network according to claim 28, wherein the electronic device comprises at least one processor one or more processors, and wherein the at least one processor one or more processors may be associated with a specific memory device.
- 46. (Currently amended) The network according to claim [[45]] <u>28</u>, wherein the at least one processor electronic device comprises a plurality of processors and each of the processors is associated with a specific memory device.
- 47. (Currently amended) The network according to claim [[46]] <u>28</u>, wherein the at-least-one processor <u>electronic device</u> comprises a plurality of processors and the plurality of processors are adapted to share the plurality of memory devices.
- 48. (Currently amended) The network according to claim [[46]] <u>28</u>, wherein the at least one processor electronic device comprises a digital signal processor (DSP) adapted to execute DSP code retrieved from at least one memory device.
 - 49. (Currently amended) A mobile handset comprising:

Art Unit: 2192

a plurality of flash memory chips comprising a first flash memory chip having a first associated <u>access</u> type and a second flash memory chip having a second associated <u>access</u> type, wherein the first associated <u>access</u> type and second associated <u>access</u> type are not the same; and

an update agent capable of identifying, from a group corresponding to memory devices to which access has been enabled, updating software corresponding to at least an associated <u>access</u> type of the at least one of the plurality of memory devices, and updating at least one of firmware and software resident in at least one of the plurality of flash memory chips using the identified updating software.

- 50. (Original) The mobile handset according to claim 49, wherein the update agent is adapted to determine information regarding a type of each of the plurality of flash memory chips at runtime, the mobile handset further comprises a plurality of flash drivers, wherein the mobile handset is adapted to employ an appropriate one of the plurality of flash drivers to update at least a portion of at least one of firmware and software resident in at least one of the plurality of flash memory chips.
- 51. (Original) The mobile handset according to claim 50, further comprising a plurality of processors, wherein each of the processors is adapted to manipulating a specific subset of the plurality of flash memory chips, and the plurality of processors are also adapted to employ the update agent to update at least one of firmware and software resident in at least one specific subset of flash memory chips.
 - 52. (Original) The mobile handset according to claim 49, further comprising:
- a first processor adapted to update at least one of firmware and software resident in at least one of the plurality of flash memory chips;
- a second processor adapted to execute code resident in at least one of the plurality of flash memory chips, wherein the first processor is adapted to execute the update agent to update at least one of firmware and software resident in at least one of the plurality of

Art Unit: 2192

flash memory chips, and the second processor is adapted to execute an update version of code resident in at least one of the plurality of flash memory chips.